- (1) Restrictions as to the physical and chemical form and radioisotopic content of radioactive waste.
- (2) Restrictions as to size, shape, and materials and methods of construction of radioactive waste packaging.
- (3) Restrictions as to the amount of waste permitted per unit volume of storage space considering the physical characteristics of both the waste and the host rock.
- (4) Requirements relating to test, calibration, or inspection to assure that the foregoing restrictions are observed.
- (5) Controls to be applied to restricted access and to avoid disturbance to the postclosure controlled area and to areas outside the controlled area where conditions may affect isolation within the controlled area.
- (6) Administrative controls, which are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure that activities at the facility are conducted in a safe manner and in conformity with the other license specifications.

[46 FR 13980, Feb. 25, 1981, as amended at 48 FR 28221, June 21, 1983; 61 FR 64268, Dec. 4, 1996]

§ 60.44 Changes, tests, and experiments.

(a)(1) Following authorization to receive and possess source, special nuclear, or byproduct material at a geologic repository operations area, the DOE may (i) make changes in the geologic repository operations area as described in the application, (ii) make changes in the procedures as described in the application, and (iii) conduct tests or experiments not described in the application, without prior Commission approval, provided the change, test, or experiment involves neither a change in the license conditions incorporated in the license unreviewed safety question.

(2) A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question if (i) the likelihood of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the application is increased, (ii) the possibility of an

accident or malfunction of a different type than any previously evaluated in the application is created, or (iii) the margin of safety as defined in the basis for any license condition is reduced.

(b) The DOE shall maintain records of changes in the geologic repository operations area and of changes in procedures made pursuant to this section, to the extent that such changes constitute changes in the geologic repository operations area or procedures as described in the application. Records of tests and experiments carried out pursuant to paragraph (a) of this section shall also be maintained. These records shall include a written safety evaluation which provides the basis for the determination that the change, test, or experiment does not involve an unreviewed safety question. The DOE shall prepare annually, or at such shorter intervals as may be specified in the license, a report containing a brief description of such changes, tests, and experiments, including a summary of the safety evaluation of each. The DOE shall furnish the report to the appropriate NRC Regional Office shown in appendix D to part 20 of this chapter, by an appropriate method listed in §60.4(a), with a copy to the Director of the NRC's Office of Nuclear Material Safety and Safeguards. Any report submitted pursuant to this paragraph shall be made a part of the public record of the licensing proceedings.

[46 FR 13980, Feb. 25, 1981, as amended at 52 FR 31612, Aug. 21, 1987; 68 FR 58814, Oct. 10, 2003]

§ 60.45 Amendment of license.

- (a) An application for amendment of a license may be filed with the Commission fully describing the changes desired and following as far as applicable the format prescribed for license applications.
- (b) In determining whether an amendment of a license will be approved, the Commission will be guided by the considerations that govern the issuance of the initial license, to the extent applicable.

§ 60.46 Particular activities requiring license amendment.

(a) Unless expressly authorized in the license, an amendment of the license

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shall be required with respect to any of the following activities:

- (1) Any action which would make emplaced high-level radioactive waste irretrievable or which would substantially increase the difficulty of retrieving such emplaced waste.
 - (2) Dismantling of structures.
- (3) Removal or reduction of controls applied to restrict access to or avoid disturbance of the controlled area and to areas outside the postclosure controlled area where conditions may affect isolation within the controlled area.
- (4) Destruction or disposal of records required to be maintained under the provisions of this part.
- (5) Any substantial change to the design or operating procedures from that specified in the license.
 - (6) Permanent closure.
- (7) Any other activity involving an unreviewed safety question.
- (b) An application for such an amendment shall be filed, and shall be reviewed, in accordance with the provisions of §60.45.

[46 FR 13980, Feb. 25, 1981, as amended at 48 FR 28221, June 21, 1983; 61 FR 64268, Dec. 4, 1996]

PERMANENT CLOSURE

§ 60.51 License amendment for permanent closure.

- (a) DOE shall submit an application to amend the license prior to permanent closure. The submission shall consist of an update of the license application submitted under §§ 60.21 and 60.22, including:
- (1) A description of the program for post-permanent closure monitoring of the geologic repository.
- (2) A detailed description of the measures to be employed—such as land use controls, construction of monuments, and preservation of records—to regulate or prevent activities that could impair the long-term isolation of emplaced waste within the geologic repository and to assure that relevant information will be preserved for the use of future generations. As a minimum, such measures shall include:
- (i) Identification of the postclosure controlled area and geologic repository operations area by monuments that

have been designed, fabricated, and emplaced to be as permanent as is practicable; and

- (ii) Placement of records in the archives and land record systems of local State, and Federal government agencies, and archives elsewhere in the world, that would be likely to be consulted by potential human intruders—such records to identify the location of the geologic repository operations area, including the underground facility, boreholes and shafts, and the boundaries of the postclosure controlled area, and the nature and hazard of the waste.
- (3) Geologic, geophysical, geochemical, hydrologic, and other site data that are obtained during the operational period pertinent to the long-term isolation of emplaced radioactive wastes.
- (4) The results of tests, experiments, and any other analyses relating to backfill of excavated areas, shaft sealing, waste interaction with the host rock, and any other tests, experiments, or analyses pertinent to the long-term isolation of emplaced wastes within the geologic repository.
- (5) Any substantial revision of plans for permanent closure.
- (6) Other information bearing upon permanent closure that was not available at the time a license was issued.
- (b) If necessary, so as to take into account the environmental impact of any substantial changes in the permanent closure activities proposed to be carried out or any significant new information regarding the environmental impacts of such closure, DOE shall also supplement its environmental impact statement and submit such statement, as supplemented, with the application for license amendment.

[46 FR 13980, Feb. 25, 1981, as amended at 48 FR 28221, June 21, 1983; 54 FR 27872, July 3, 1989; 61 FR 64268, Dec. 4, 1996]

§ 60.52 Termination of license.

- (a) Following permanent closure and the decontamination or dismantlement of surface facilities, DOE may apply for an amendment to terminate the license.
- (b) Such application shall be filed, and will be reviewed, in accordance